

the vicinity of Okalooska, La. 12th, Mansfield, O., following a heavy thunder-storm, Rocky Fork over flowed its banks and flooded lower portion of city; destructive freshets in the vicinity of Wheeling, W. Va. 31st, the Sacramento valley still remains under water, the depth of water at Sacramento City oscillating between 22 ft. 1 in. and 22 ft. 3 in. throughout the month, the southern suburb below "cross levee" and the village at Washington are still submerged; at Colusa, on the 30th, the water was still near high water mark.

*Hail.*—1st, Ft. McPherson, Neb.; Baxter Springs, Kan.; De Soto, Neb.; Franklin, Pa. 2nd, Sidney Bks., Neb.; Martinsville, Ill.; Milford, Ind.; Fayetteville, N. C.; Indianapolis, Ind. 3rd, Ft. McHenry, Fallston and New Market, Md.; De Soto, Neb.; Freehold and Pleasant Run, N. J.; Ardenia, N. Y.; Accotink Va.; Carlisle and Philadelphia, Pa. 4th, De Soto, Neb. 6th, Rockford, Ill.; Detroit, Mich.; Burlington, Ia.; Logansport, Ind. 7th, Baxter Springs, Kan.; De Soto, Neb.; Catawissa, Pa.; Boise City, Idaho; New London. 8th, Emerson, Neb.; Beloit, Wis.; Ft. Gibson, I. T.; Fredericksburg and Uvalde, Tex.; Duluth. 9th, Brookhaven, Miss.; Corsicana and Galveston, Tex. 10th, Kensico, N. Y. 11th, Ft. Independence, Mass.; Nora Springs, Ia.; New Bedford and Fall River, Mass.; Kensico, N. Y.; New London. 12th, Cornish, Me.; Keusico, N. Y.; Nashville. 13th, Milford, Ind.; Rowe, Mass.; Woodstock, Vt.; Mt. Solon, Accotink and Fort Whipple, Va.; Bangor and Eastport, Me. 15th, Muscatine, Ia. 16th, Chicago; Detroit. 17th, Reading, Pa. 18th, Ft. Garland, Col.; Creswell, Kan.; Somerset, Mass.; Winnemucca, Nev.; Santa Fe N. M.; New London. 19th, North Volney, N. Y. 20th, Iowa City, Ia.; Genoa, Neb. 23rd, Fort Wayne and Grand Haven, Mich. 24th, Fallston, Md.; Somerset and New Bedford, Mass. 26th, Ft. Wallace, Kan.; Fresno, Cal.; Vevay, Ind.; Independence, Kan.; Detroit. 27th, New Orleans; Vicksburg; Albany; Green Spring, Ala.; Creswell and Independence, Kan.; Brookhaven and Fayette, Miss.; Corsicana and Mason, Tex. 28th, Salt Lake City; Portsmouth, N. C.; De Soto, Neb.; Fayetteville, N. C.; Spartanburg, S. C.; Clarksville and McMinville, Tenn.; Coalville, Utah; Los Angeles, Cal. 29th, Dodge City, Kan. 30th, Camp McDermit, Nev.; Ft. Fred Steele, Wy. Ty.; Fayetteville N. C.; Cincinnati and Lewisburg, Ohio; Brownsville, Pa. 31st, Lewisburg, Ohio; Westchester and Philadelphia, Pa.; Morgantown, W. Va. At Creswell, Kan., on the 1st 2:30 p. m., a furious hail-storm from SW.; 2 inches of hail and 1.58 in. of water fell in 30 minutes.

*Depth of Snow at close of Month.*—On summit of Mt. Washington, 42 in.; Pike's Peak, 40 in.; Eastport, Me., 15 in.; Elmira, Ill., 1 in.; Rowe, Mass., in woods in vicinity, 6 in.; Dunbarton, N. H., snow drifts in neighboring forests; Urbana, Ohio, 1-10 in.; Catawissa, Pa., 1-10 in.; Woodstock, Vt., half of surface of ground covered.

*Rainy Days.*—Number of days on which rain or snow has fallen varies as follows: New England, from 8 to 23; Middle Atlantic States, from 6 to 21; South Atlantic States, from 4 to 8; Gulf States, from 4 to 9; Ohio valley, from 7 to 17; Tennessee, 10; Lower Lake region, from 15 to 23; Upper Lake region, from 9 to 18; Upper Mississippi valley, from 10 to 15; Lower Missouri valley, from 7 to 13; Rocky Mountains, 8; Pacific Coast States, from 9 to 15.

*Cloudy Days.*—For New England the number varies from 8 to 17; Middle Atlantic States, 4 to 13; South Atlantic States, 4 to 10; Gulf States, 2 to 10; Tennessee, 4 to 7; Ohio valley, 6 to 15; Lower Lake region, 12 to 18; Upper Lake region, 10 to 18; Northwest, 4 to 12; Rocky Mountains, 6 to 13; Pacific Coast States, 5 to 18.

## RELATIVE HUMIDITY.

The average percentage of relative humidity for the month ranges about as follows: New England, from 62 at Springfield, Mass., to 75 at Wood's Holl and Eastport; Middle Atlantic States, 53 at Lynchburg to 81 at Atlantic City; South Atlantic States, 61 at Augusta to 86 at Cape Hatteras; 67 at Key West; Gulf States, 55 at Shreveport to 75 at Galveston; Ohio valley and Tennessee, 54 at Memphis to 67 at Pittsburgh; Lower Lake region, 66 at Oswego to 82 at Buffalo; Upper Lake region, 68 at Marquette to 83 at Milwaukee; Upper Mississippi valley, 57 at St. Louis to 67 at Keokuk; Red River of the North valley, 74 at Pembina to 76 at Breckenridge; Lower Missouri valley, 62 at Leavenworth to 71 at Bismarck; Western Texas, 41 at Fort Griffin to 44 at Mason; Indian Territory, 56 at Fort Gibson; western portions of Kansas and Nebraska, 54 at Dodge City to 61 at North Platte; Rocky Mountain Stations, 41 at Santa Fe to 59 at Cheyenne; Utah and Nevada, 53 at Salt Lake City to 58 at Winnemucca; Idaho, 62 at Boise City; California, 73 at Los Angeles to 79 at San Diego. The percentage at *high* stations is 65 for Pike's Peak and 86 for Mount Washington.

## WINDS.

The prevailing winds at the Signal Service stations are shown by the arrows, flying with the wind, on chart No. II. The *maximum* velocities, in miles per hour, have been given in the description of the movements of low pressure areas.

*Total Movements of the Air.*—The following are the *largest* monthly movements as recorded at the Signal Service stations, viz.: Pikes Peak, 17,279 miles; Cape May, 13,171; Sandy Hook, 12,335; Thatcher's Island, 12,176; Cape Lookout, 12,039; Dodge City, 11,711; North Platte, 10,892; Sandusky, 10,832; Barnegat, 10,472; Kittyhawk, 10,200; Breckenridge, 10,374; Cheyenne, 10,024; Cape Henry, 9,961; Ft. Whipple, 9,704; Boston, 9,599; Eastport, 9,489; Key West, 9,015. The *smallest* are: Visalia, 1,728 miles; Deadwood, 2,156; Uvalde, 2,627; Bracketville, 3,088; Augusta, 3,155; Boise City, 3,169; Lynchburg, 3,225; Laredo, 3,364; Knoxville, 3,562; Los Angeles, 3,690; Shreveport, 3,944; Springfield, 3,990.

*Local storms, tornadoes, &c.*, have occurred, as follows: On the 2nd, Casey Co., Ky., between 2 and 3 p. m., a severe tornado occurred, doing great damage in vicinity of Rich Hill and Mt. Olive. Its path was about 400 yards wide, and in its course swept away dwellings, large trees, horses, cattle and other stock;